NORTH LEG - MD 237 (CHANCELLORS RUN ROAD) AND FIRE DEPARTMENT LANE/AMBER DRIVE

* MESSAGE USED IF DISTANCE FROM NEAREST PUSHBUTTON FOR PERPIDICULAR CROSSING IS < 10'
** MESSAGE USED IF CROSSWALK DIVERGES FROM OR CONVERGES WITH PARALLEL TRAFFIC

INSTALL A FULL-TRAFFIC-ACTUATED, EIGHT-PHASE CONTROLLER WITH VIDEO INTERFACE EQUIPMENT (1-4) CAMERAS, ONE (1) FOUR-CHANNEL, TIME-DELAY-OUTPUT LOOP DETECTOR AMPLIFIERS WITH SYSTEM PACKAGE AND ASSOCIATED HARNESSES HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET.

MAINTENANCE OF TRAFFIC

PROJECT CONTACTS

UPON COMPLETION OF THIS PROJECT, THE CONTRACTOR SHALL NOTIFY MR. ROBERT SNYDER OF SHA AT (410) 787-7635 TO ARRANGE FOR THE PHONE LINE INSTALLATION. THE CONTRACTOR IS TO PROVIDE MR. SNYDER THE NEAREST STREET ADDRESS, ZIP CODE, AND PHONE NUMBER.

WAIT: "WAIT TO CROSS CHANCELLORS RUN AT AMBER AND FIRE DEPARTMENT."*

EAST LEG - FIRE DEPARTMENT LANE AND MD 237 (CHANCELLORS RUN ROAD)

WAIT: "WAIT TO CROSS FIRE DEPARTMENT AT CHANCELLORS RUN." *

NOTE: MESSAGES FOR INTERSECTION CONFIGURATIONS, VARYING FROM THE ABOVE ARE TO BE APPROVED BY THE DIRECTOR, OFFICE OF TRAFFIC AND SAFETY.

THE FOLLOWING TRAFFIC CONTROL STANDARDS SHALL BE REFERENCED FOR THE PROJECT. ADDITIONAL TRAFFIC CONTROL STANDARDS MAYBE USED AS DIRECTED BY THE ENGINEER.

WEST LEG - AMBER DRIVE AND MD 237 (CHANCELLORS RUN ROAD)

WAIT: "WAIT TO CROSS AMBER AT CHANCELLORS RUN."*

WALK: RAPID TICK

WALK: RAPID TICK

WALK: RAPID TICK

CONTROLLER REQUIREMENTS

STANDARD NO. MD-104.02-01 (SHOULDER WORK)

THE CONTACT PERSONS FOR SHA ARE AS FOLLOWS:

MR. JOHN S. MAYS ASSISTANT DISTRICT ENGINEER - MAINTENANCE

ASSISTANT DISTRICT ENGINEER - TRAFFIC

MS. KIMBERLY TRAN

PHONE: (410) 841-1019

PHONE: (410) 841-1013

STANDARD NO. MD-104.02-14 (INTERSECTION FLAGGING OPERATION)

STANDARD NO. MD-104.02-03 (LANE SHIFT)

PHONE DROP

A. EQUIPMENT TO BE SUPPLIED BY THE SHA ITEM NO. QUANTITY 9044 1 EACH

1 EACH

137 S.F.

DESCRIPTION EIGHT-PHASE, FULL-TRAFFIC-ACTUATED CONTROLLER, TELEMETRY INTERFACE PANEL AND HARNESS HOUSED IN A NEMA SIZE "6" BASE MOUNTED CABINET VIDEO DETECTION INTERFACE EQUIPMENT: 1-4 CAMERAS

EQUIPMENT LIST "A"

SHEET ALUMINUM SIGNS TO CONSIST OF : D-3(1) SIGN (VARIABLE \times 16 IN.) DUAL FACED -MAST ARM MOUNT ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 237, RIGHT ARROW" (30 IN. x 51 IN.) - POLE MOUNT ASSOCIATED SHIELD ASSEMBLY "NORTH, MD 237, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT

ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 237, RIGHT ARROW" (30 IN, x 51 IN,) - POLE MOUNT ASSOCIATED SHIELD ASSEMBLY "SOUTH, MD 237, LEFT ARROW" (48 IN. x 75 IN.) - POLE MOUNT R10-3(1) SIGN (9 IN. x 15 IN.) TO READ "PUSHBUTTON TO CROSS CHANCELLORS RUN ROAD" - 2 EACH

R10-3(1) SIGN (9 IN. × 15 IN.) TO READ "PUSHBUTTON TO CROSS AMBER DRIVE" - 2 EACH R10-3(1) SIGN (9 IN. \times 15 IN.) TO READ "PUSHBUTTON" - 2 EACH TO CROSS FIRE DEPARTMENT LANE" W3-3 SIGN (36 IN. x 36 IN.) WITH "NEW" PANEL (24 IN. x 24 IN.) AND FLAG - GROUND MOUNT - 2 EACH

EQUIPMENT LIST "C"

C. EQUIPMENT TO BE REMOVED AND RETURNED TO SHA ALL REMOVED SIGNAL MATERIALS SHALL BECOME PROPERTY OF THE CONTRACTOR

PHASE CHART

1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16

PHASE 1 AND 5	R ← G−	R +G−	R	R ← G−	æg. +	R	R	R	R	R	DW	DW	DW	DW	DW	DW	
1 AND 5 CHANGE	PHASE	1 + 5	MAY CH	ANGE TO	PHASE	1 + 6	, PHASE	2 + 5	OR PHAS	E 2 +	6					,	Ţ₩
PHASE 1 + 6	G ←G	G	G	R	R	R	R	R	R	Ŕ	DW	DW	DW	DW	DW	DW	
1 + 6 CHANGE	G ←Y –	G +Y−	G	R	R	R	R	R	R	R	DW	DW	DW	DW	DW	DW	1 ▼
PHASE 2 + 5	R	R	R	GG →	G −	G	R	R	R	R	DW	DW	DW	DW	DW	DW	
2 + 5 CHANGE	R	R	R	G ←Y	G ←Y−	G	R	R	R	R	DW	DW	DW	DW	DW	DW	
PHASE 2 + 6	G	G	G	G	G	G	R	R	R	R	wĸ	wĸ	WK	wĸ	DW	DW	•
PED CLEARANCE	G	G	G	G	G	G	R	R	R	R	FL/DW	FL/DW	FL⁄DW	FL⁄DW	DW	DW	
2 + 6 CHANGE	Y	Υ.	Y	Y	Υ	Y	R	R	R	R	DW	DW	DW	DW	DW	DW	•
PHASE 4 + 8	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	DW	DW	4
4 + 8 CHANGE	R	R	R	R	R	R	Y	Y	Υ	Y	DW	DW	DW ·	DW	DW	DW	<u></u>
PHASE 4 + 8 ALT	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	wĸ	WK]• /
PED CLEARANCE	R	R	R	R	R	R	G	G	G	G	DW	DW	DW	DW	FL⁄DW	FL⁄DW	
4 + 8 ALT CHANGE	R	R	R	R	R	R	Υ	Υ	Y	Y	DW	DW	DW	DW	DW	DW	⊢• ♥
FIREHOUSE PRE-EMPTION 1 & 2	G	G	G	G	G	G	R	R	R	R	DW	DW	DW	DW	DW	DW	
	Υ	Y	Y	Y	Y	Υ	R	R	R	R	DW	DW	DW	DW	DW	DW	<u> </u>
FIREHOUSE PRE-EMPTION 3	R	R	R	R	R	R	· G	G	G	G	DW	DW	DW	DW	DW	DW	
	R	R	R	R	R	R	Υ	Υ	Y	Y	DW	DW	DW	DW	DW	DW	∀
FLASHING	FLY	FLY	FLY	FLY	FLY	FLY	FL⁄R	FL/R	FL⁄R	FL/R	DARK	DARK	DARK	DARK	DARK	DARK	+

EQUIPMENT LIST "B"

B. EQUIPMENT TO BE FURNISHED AND/OR INSTALLED BY THE CONTRACTOR

_(CATEGORY CODE	QUANTITY	DESCRIPTION
	203030	11 C.Y.	TEST PIT EXCAVATION
	585621	480 L.F.	12 INCH HEAT APPLIED WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKINGS LINE
	585625	125 L.F.	24 INCH HEAT APPLIED WHITE PREFORMED THERMOPLASTIC PAVEMENT MARKING LINE
	801004	22 C.Y.	CONCRETE FOR SIGNAL FOUNDATION
	801106	38 L.F.	WOOD SIGN SUPPORTS 4" × 6"
	802501	625 L.F.	NO. 6 A.W.G. STRANDED BARE COPPER GROUND WIRE
	805115	150 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
	805118	280 L.F.	4 INCH SCHEDULE 80 RIGID PVC CONDUIT - BORED
	805125	25 L.F.	2 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
	805135	705 L.F.	3 INCH SCHEDULE 80 RIGID PVC CONDUIT - TRENCHED
	805140	160 L.F.	4 INCH SCHETTLE 80 RIGID PVC CONDUIT - TRENCHED
	807202	1 EACH	EMBEDDED METERED SERVICE PEDESTAL
	810010	75 L.F.	ELECTRICAL CABLE 1-CONDUCTOR NO. 4 A.W.G THHN/THWN
	810601	4 EACH	NONINVASIVE DETECTOR, 1000 FT. LEAD-IN
	811001	11 EACH	FURNISH AND INSTALL ELECTRICAL HANDHOLE
	813010	2 EACH	250 WATT HIGH PRESSURE SODIUM LAMP AND LUMINAIRE
	813014	26 S.F.	INSTALL GROUND MOUNTED SIGN
	813015	111 S.F.	INSTALL OVERHEAD SIGN
	816001	4 EACH	VIDEO DETECTION CAMERA
	816005	3 EACH	CONTROL CABLE, 250 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
	816010	1 EACH	CONTROL CABLE, 500 FOOT VIDEO DETECTION CAMERA TO CONTROLLER
	816201	1 EACH	DISCRIMINATOR MODULE, 4 CHANNEL, NO. 764
	816215	3 EACH	OPTICOM NO. 721 DETECTOR EYE
	818004	4 EACH	10 FOOT BREAKAWAY PEDESTAL POLE
	818036	2 EACH	STEEL POLE WITH A 50 FOOT MAST ARM
	818041	1 EACH	STEEL POLE WITH A 60 FOOT MAST ARM
	818052	1 EACH	STEEL POLE WITH A 70 FOOT MAST ARM
	837001	7 EACH	GROUND ROD - 3/4 INCH DIAMETER × 10 FOOT LENGTH
	860272	38 EACH	12 INCH VEHICULAR TRAFFIC SIGNAL HEAD SECTION
	860292	2 EACH	CUT, CLEAN, GALVANIZE AND CAP TRAFFIC SIGNAL STRUCTURE
	861107	960 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 14 A.W.G.)
	861105	1080 L.F.	ELECTRICAL CABLE - 5 CONDUCTOR (NO. 14 A.W.G.)
	861108	1530 L.F.	ELECTRICAL CABLE - 7 CONDUCTOR (NO. 14 A.W.G.)
	861116	470 L.F.	ELECTRICAL CABLE - 2 CONDUCTOR (NO. 12 A.W.G.)
	866103	2 EACH	15 FOOT LIGHTING ARM ON SIGNAL STRUCTURE
	871202	1 EACH	INSTALL CONTROLLER AND CABINET - BASE MOUNT
	800000	6 EACH	16" LED COUNTDOWN PEDESTRIAN SIGNAL HEAD
	800000	6 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE STATION
	800000	1 EACH	AUDIBLE/TACTILE PEDESTRIAN PUSHBUTTON BASE UNIT
	800000	710 L.F.	FURNISH AND INSTALL 4 CONDUCTOR OPTICOM CABLE
	800000	1 EACH	REMOVE AND DISPOSE OF EXISTING MATERIAL AND EQUIPMENT

STATE OF MARYLAND DEPARTMENT OF TRANSPORTATION STATE HIGHWAY ADMINISTRATION

OFFICE OF TRAFFIC & SAFETY TRAFFIC ENGINEERING DESIGN DIVISION

MD 237 AND AMBER DRIVE /FIRE DEPARTMENT LANE



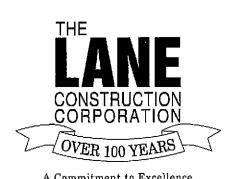
Whitman, Requardt and Associates, LLP

801 South Caroline Street Baltimore, Maryland 21231 (410) 235-3450

GENERAL INFORMATION SHEET

SCALE NONE ADVERTISED DATE DECEMBER 10, 2008 CONTRACT NO. ____SM7575171 S. BLOSS ST MARYS DESIGNED BY S. BLOSS 18023702.71 LOGMILE DRAWN BY N. LEARY JOHULLOSTIMS NO. CHECKED BY F.A.P. NO. <u>ACSTP-HP-2442(001)E</u>

Engineers, Architects and Planners 801 South Caroline Street Baltimore, Maryland 21231



Whitman, Requardt and Associates, LLP

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TS NO. 4690 | DRAWING TSP-3 OF 16

SHEET NO. 4 OF 36

A Commitment to Excellence 410-235-3450

DISTRICT UTILITY ENGINEER PHONE: (301) 624-8115

MR. RICHARD L. DAFF. SR. CHIEF. TRAFFIC OPERATIONS DIVISION PHONE: (410) 787-7630